Appendix A – Amended Claims

1. (currently amended) A method for inhibiting or preventing treating a viral human immunodeficiency virus infection in a human patient, said method comprising administering to the patient an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

2 -3 (canceled)

4. (original) A method as recited in Claim 1, wherein the compound has structure I:

$$R_2$$
 R_2
 R_1
 R_2
 R_2
 R_3
 R_4
 R_4
 R_4
 R_5
 R_1

wherein M is 2H or a metal ion; R1 and R2 are each independently hydrogen, C_1 to C_4 alkyl or hydroxyalkyl; and R3, R4, R5, and R6 are each independently hydrogen, phenyl, or substituted phenyl having structure II:

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wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

- **5**. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.
- **6.** (withdrawn) A method as recited in Claim 4, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.
- 7. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.
- **8.** (currently amended) A method as recited in Claim 1, additionally comprising the step of exposing tissue of the patient to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's inhibition or prevention treatment of viral infection.
- 9. (currently amended) A method as recited in Claim 1, wherein the compound is selected from the group consisting of Compounds 4, 6, 10, 12, 16, 18, 22, 24, 31, and 33, as depicted in Figures 1, 2, 3, 4, and 6.

- **10.** (withdrawn) A method as recited in Claim 1, wherein the compound is Compound **16**.
- 11. (withdrawn) A method as recited in Claim 1, wherein the compound is Compound 31.
- **12.** (original) A method as recited in Claim 1, wherein the compound is Compound **33**.
- 13. (currently amended) A method for killing or inhibiting the human immunodeficiency virus viruses in or on a nonliving material, said method comprising treating the material with an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

14. (canceled)

15. (original) A method as recited in Claim 13, wherein the compound has structure I:

$$R_2$$
 R_1
 R_2
 R_3
 R_4
 R_4
 R_5
 R_1

wherein M is 2H or a metal ion; R1 and R2 are each independently hydrogen, C_1 to C_4 alkyl or hydroxyalkyl; and R3, R4, R5, and R6 are each independently hydrogen, phenyl, or substituted phenyl having structure II:

$$R_7$$
 R_{11}
 R_8
 R^{10}
 R_9

11

wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

- **16.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.
- 17. (withdrawn) A method as recited in Claim 15, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.
- **18.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.
- 19. (currently amended) A method as recited in Claim 13, additionally comprising the step of exposing the material to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's killing or inhibition of viruses.
- 20. (currently amended) A method as recited in Claim 13, wherein the compound is selected from the group consisting of Compounds 4, 6, 10, 12, 16, 18, 22, 24, 31, and 33, as depicted in Figures 1, 2, 3, 4, and 6.

- **21.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound 16.
- **22.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound **31**.
- 23. (original) A method as recited in Claim 13, wherein the compound is Compound 33.